

## ABSTRACT OF THE DISCLOSURE

**Organic Capacitor having a Voltage-controlled Capacitance**

5 The present invention relates to an organic capacitor having a voltage-controlled variable capacitance. The capacitor of the invention comprises at least one first electrode, a second electrode, and an interposed insulator layer and is characterized by at least one first semiconductor layer disposed between the first electrode and the second electrode. Between the first and second electrodes there is applied a voltage  
10 which acts on the semiconductor layer such that at least one concentration of free charge carriers in this at least first semiconducting layer is varied in a controlled manner by the applied voltage. The concentration of the charge carriers defines the capacitance of the capacitor.

15 (Figs. 1a, 1b)